AGENDA ITEM 16 JUNE 6, 2012

Contact: Diana Gonzalez

FACULTY PRESENTATION AT THE UNIVERSITY OF IOWA: "DUBUQUE PARTNERSHIP: MAPPING RENEWABLE ENERGY ASSETS"

Action Requested: Receive the presentation.

<u>Executive Summary:</u> Professor Chuck Connerly and his student, Robyn Fennig, will discuss the interactive website she produced that allows individuals to obtain wind, solar, and ground source heat pump potential for any parcel in the city of Dubuque. The information is expected to be displayed on the Greater Dubuque Development Corporation's website for use by the general public. Dan McDonald, vice-president for existing business in the Greater Dubuque Development Corporation, was the chief project partner and he will discuss the value of the project.

Using advanced computer technology, students created a map of the solar radiation intensity for each parcel in the city as well as a 4 x 4 breakdown of the varying intensity on each roof. The map shows which parts of the city are best for solar radiation and which parts of buildings and parcels are best. A similar mapping was done for wind intensity and the potential for geothermal heat citywide. The mapping shows that solar power has potential for significant parts of the city while wind power has more limited potential and geothermal power depends on the proximity of a property to leaking underground storage tanks.

The students listed three issues for the city to address: "reduce regulatory barriers in Dubuque; reclassify small-scale turbines as accessory uses to conform to zoning regulations; and seek ways to minimize the impact of renewable energy installations on the historic character of Dubuque."

Charles Connerly joined the University of Iowa School of Urban and Regional Planning in 2008 as professor and director. He taught urban planning at Florida State University from 1981 to 2008. In 2011, Dr. Connerly began a two-year term as President of the Association of Collegiate Schools of Planning (ACSP). His current research focuses on two books – one is on the history of black communities in the South after emancipation, the challenges they face from gentrification, and the role and effectiveness of planning regarding the preservation or transformation of these communities. The other book focuses on the impact of university and city development on each other in Iowa City with special attention on the role of university and city planning and development policies regarding the property damage during the 2008 flood of the Iowa River. One of Professor Connerly's most recent publications, *The Most Segregated City*, was named one of the top 10 planning books in 2006 by Planetizen. In 2007, ACSP named the book a recipient of the Paul Davidoff Award, which recognizes an outstanding book publication promoting participatory planning and positive social change, opposing poverty and racism as factors in society, and seeking ways to reduce disparities between rich and poor, white and black, men and women.